This monthly column highlights the National Metal Finishing Resource Center (NMFRC or Resource Center), an Internet-based information system being established by the American Electroplaters and Surface Finishers Society (AESF), the National Association of Metal Finishers (NAMF), the Metal Finishing Suppliers’ Association (MFSA), and the National Center for Manufacturing Sciences (NCMS). The Resource Center is being funded under a joint program by the Commerce Department’s National Institute of Standards and Technology (NIST) and the U.S. Environmental Protection Agency (EPA).

The Resource Center is a comprehensive metal finishing technical assistance and environmental compliance site. To join the NMFRC, set your Internet browser to: http://cai.eclipse.net.1

NMFRC Vendor Directory
The Vendor Directory, a major element of the Resource Center, is where companies and individuals can get information on metal finishing related products and services. The vendor directory is accessed from the left menu of the NMFRC home page. By clicking on the Vendor Directory icon, a screen appears that permits searching by product or service type, or company name. By clicking on a major product category, such as “Surface Finishing Equipment,” the user is given a second, more detailed screen (see the illustration). For Surface Finishing Equipment, the new screen displays 34 subcategories of equipment (e.g., Rectifiers) and more than 100 specific equipment products (e.g., Regulated, Liquid Immersed; Regulated, Motor-driven Stepless; Regulated, Pulsed Thyristor). Overall, there are more than 500 specific products and services contained in the directory, all accessible in a matter of seconds. By clicking on a specific product type, the user is given a new screen that displays a table listing all companies that sell that particular product, their location, telephone and FAX numbers and the name of a contact. Companies that are members of the NMFRC have their company name in blue text (i.e., hyperlinked) and non-member companies are in black text (unlinked). By clicking on the name of a member company, the user is automatically linked to the website of this firm. NMFRC member companies pay an annual fee for having a website that either resides on the Resource Center server (computer) or for linking to another server. In any event, the user is transported to a company’s website.

Vendor Websites and Servers
Because all documents and resources on the World Wide Web are accessible by their Unified Resource Locator (URL or web address), the physical or geographical location of the server on which any resource

1If you need help getting on-line or connecting to the NMFRC contact Mark Eelman at 908/755-7753
Vendor websites, whether they reside on the NMFRC server or any server anywhere in the world, are accessible to everyone who knows the URL. Furthermore, in the case of vendor websites residing on the NMFRC server, it is not necessary to gain access through the NMFRC itself. Each site can be directly accessed (bypassing the NMFRC home page and the Vendor Directory) and each site is independently listed with all the major WWW search engines.

There are some important factors to consider, however, when selecting a server. These include: traffic lure, speed, reliability, cost, and design/functional capabilities.

Traffic lure refers to the ability to attract potential customers to a website. A website is a useless tool if qualified potential customers don’t know that it exists or can’t locate it. The NMFRC has solved this problem by creating a metal finishing Vendor Directory that centralizes the industry’s vendors on a single server and attracts potential customers with its extensive technical and regulatory resources. The Resource Center is registered with all the major Internet search engines (e.g., Lycos, InfoSeek, Yahoo). All vendor websites are independently listed with all search engines. This means that searches containing words matching those on the vendor website will return to the vendor’s website, not the NMFRC’s home page.

Internet search engines, which are free to all Internet users, help to locate websites by indexing keywords from each site. When an Internet user accesses a search engine (each search engine has its own home page) by typing in the name of a product, service, company or any word that describes the information he/she seeks. Almost instantly, the search engine examines its files of millions of websites, retrieves the addresses of applicable sites and displays a prioritized list of sites on the user’s screen. The user then simply clicks on the name of any site on the list and is transported to that website. Because of the vast resources of the NMFRC and through skilled indexing, companies located in the Vendor Directory will have high priority on the search engines’ displays.

Server speed and reliability are a function of the hardware and phone line capacity of the server. It is important to select a server that operates a high-speed line and has a record of low down-time. Potential customers will be quickly discouraged if the server is not functioning (they won’t be able to view your site) or if information retrieval is slow. The best advice is to check out the server by viewing various websites that currently reside there.

The cost of having a website on a server is low because it simply involves disk space on a computer. As a result, the current cost of using a server that provides 24 hr/day service is only about $25 to $50 per month, depending on the size of the website. The actual cost of Internet advertising and sales is mostly because of labor costs for design and maintenance of a website. Design and maintenance costs vary widely because of the range of sizes and complexities of websites. For example, many major corporations have invested tens of thousands of dollars in their graphic-rich websites, while many small businesses have developed their own relatively plain sites for free or paid a few hundred dollars to a thousand dollars for a design.

Current and Future Internet Advertising
And Sales Opportunities
The number of metal finishing suppliers having websites is rapidly growing, spurred by the expansion of the Internet and the number of potential customers that are on-line. According to the American Internet Users Survey, 9.5 million Americans were using the Internet (in addition to e-mail) by the end of 1995. More importantly, that number represents a more than doubling of American Internet users during 1995. Internet advertising and sales are relatively inexpensive and are expected by many experts to provide high dividends in the near future. These projections are based on the versatility of the Internet technology and the instantaneous accessibility of information it provides.

The typical vendor website today includes a description of the company and its products or services, telephone/fax numbers, e-mail address, and possibly some graphics (e.g., logo, photo of headquarters or equipment). In general, most sites are attractive, but lack the charisma and dynamics that appeal to Internet users. The tools available to website developers have evolved rapidly over the past few years. For example, audio, even video can be inexpensively integrated into websites. More importantly, many websites are now interactive and dynamic. Users can direct the servers of such sites to provide continuously updated documents or data (such as news or stock prices) on demand via database searches. The trend toward increasing sophistication of interactive websites is being driven by their enormous popularity.

At this time, the Internet is used much more frequently for advertising than for sales. The “virtual marketplace” is not far in the future, however, and some sales opportunities are already possible. For example, it is a simple task to set up an on-line order form for common supplies like filter cartridges, plating bath chemicals, buffing compounds, etc. A customer would simply type in his name or customer code, click on the type of products he wants to purchase, indicate the quantity, and click on the “submit order” button. Their order is instantly placed and an e-mail message is sent to the customer to confirm the order.

Another powerful way an interactive website can provide a service to customers is via on-line price quoting or job tracking. Vendors who sell commodity-type items that have fluctuating prices can maintain a continuously updated price database that is available via form-based queries to the website user. Manufacturing companies may wish to provide some portion of their job-tracking information to customers, such as projected shipping dates, delay alerts, etc. Access to this information can be restricted to a particular customer by establishing a simple pass code system.

In the development stages of Internet software is voice communications, which will be a future sales tool. Imagine, a customer could click on an icon of a product and instantly be connected through his computer to a sales or technical representative.